Learning Without Limits

The Information and Instructional Technology Strategic Plan for the University System of Georgia

April 1, 2002

Table of Contents

Acknowledgments

The University System of Georgia Information and Instructional Technology Strategic Plan is the result of a collaborative effort on the part of campus representatives from throughout the System, the System Office, the Georgia Public Library Service, and industry experts. We would like to acknowledge the efforts of those who participated in this process:

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Introduction

> *Information technology is now well understood as a strategic resource in higher education, a driving force in enabling change. Information technology continues to transform teaching, learning, scholarship, research, business and administrative practices and our relationships with students, alumni, and many other constituents. – EDUCAUSE 2002*

Is the University System of Georgia (USG) properly prepared to act on these new realities in technology? How do we establish the appropriate strategic vision for Information and Instructional Technology (IIT), link them to our core values, prioritize resulting goals, and ensure effective and ongoing integration with the rest of the organization?

"Learning Without Limits"

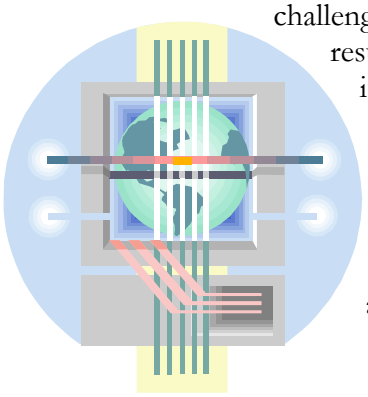
"Learning Without Limits," the University System of Georgia Information and Instructional Technology Strategic Plan (the "Plan"), seeks to address the questions posed by the new technology-driven realities by effectively focusing IIT's formidable capabilities to enable the removing or lowering of limits, or barriers, that stand in the way of achieving a more educated Georgia.

In the context of this plan, "Learning" encompasses the traditional functions of the University System of Georgia – instruction, research, public service, and the required supporting administration. The Plan seeks to set realistic goals and stresses that the value of IIT lies in its ability to enable all aspects of learning in secure and innovative ways throughout the System to push beyond the current limitations of time, space, access, and resources.

The Plan has been developed to ensure that System IIT resources such as instructional support, infrastructure, information systems, research support, information access, and support services are positioned to provide the greatest value in support of the System's strategic vision, mission, and goals. The Plan focuses on strategic use of IIT resources at the System level and not on the System's Office of Information and Instructional Technology that is charged with its development and implementation.

This Plan and the action plan development and decision-making that follow must be integrated and aligned with the USG Strategic Plan and with other planning efforts such as institutional IIT strategic planning. This process will include developing criteria for ensuring the most effective strategies for the deployment of applications and services within the System.

This document outlines the background, the current IIT USG environment, the current trends and challenges, the foundation vision and mission statements, guiding principles, and resulting strategic goals and objectives. As its foundation, the IIT Strategic Plan is based on supporting and better enabling the USG in reaching its vision and mission for a more educated Georgia. See Appendix A for the complete USG vision, mission, and strategic objectives.



For complete documentation of the IIT Strategic Planning Project, as well as referenced documents, please visit the IIT Strategic Planning Project website at http://www.usg.edu/usgweb/iitsp.

Background

The University System of Georgia (USG) has been greatly affected by the changes and developments in technology during the past few decades. Today, the ongoing technology-enabled transformations in instructional support, infrastructure, information systems, research, information access, and service continue to reshape the form and substance of higher education. Given these circumstances, the Board of Regents (BOR) recognized the critical need to develop a System Information and Instructional Technology (IIT) strategic plan and an ongoing planning process to ensure that the USG prospers in the future.

The objective of this report is to describe the planning process and its results.

⏪ Rewind to the Past

We will rewind to capture the images of where IIT in the USG has been since the early 1970s.

⏸ Pause on Today

We will pause on frames that depict today's overall technology environment and challenges. As we pause, will review the following:

- ***Current USG IIT Environment***
- ***Current IIT Trends and Challenges***

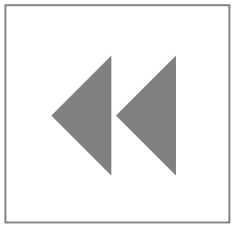
⏩ Fast Forward to the Future

We will fast forward to a future environment where Information and Instructional Technology effectively supports learning without limits for a more educated Georgia. As we look to the future, we will explore the following:

- ***The Foundation – Vision, Mission, and Guiding Principles***
- ***The Strategic Goals and Objectives***
- ***The Planning Process***

Rewind to the Past

In the seventies, information technology (IT) was a rare resource composed of large systems doing specialized research applications and routine administrative tasks. Information technologists within the USG began working together to address the sharing of resources and common challenges leading to the establishment of the first System information technology group, the University System Computer Network (USCN).

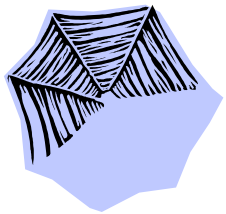


The Board of Regents (BOR), recognizing the growing importance of IT, formalized a Systemwide structure in 1989 approving the creation of the Office of Information Technology (OIT). This organization was led by a new Vice Chancellor reporting directly to the Chancellor. One of the first functions of OIT was to develop a plan for the future (OITPLAN – See Appendix B). Many of the decisions made 10 years ago have been carried forward and updated leading to practices that are listed in the *Current USG IIT Environment* section on page 9.

A new Chancellor appointed in 1994 aggressively led the BOR and the USG through a comprehensive strategic planning process. This process resulted in strategies designed to catapult the USG into the forefront as one of the leading higher education organizations in the Southeast and in the nation.

With this new administration came a number of major changes for OIT. The Vice Chancellor's position was moved to report to the new Senior Vice Chancellor for Academic Affairs and a second "I," representing instruction, was added to more accurately reflect and emphasize the increasing importance and use of technology in teaching and learning.

New funding jump-started the Office of Information and Instructional Technology (OIIT) in the form of special initiatives. These Special Funding Initiatives (SFIs) included the following:



- The widely acclaimed One-Statewide Library project known as GeorgiA LIbrary LEarning Online (GALILEO).
- Connecting Teachers and Technology (CTT) that substantially affected faculty use of technology through participation in System sponsored activities like the Faculty Development Institute and Course Development Grants.
- Connecting Students and Services (CSS) that instituted more responsive and supportive administrative systems.
- Enhancement of the statewide network, PeachNet, that provided connectivity among campuses and to the Internet.
- The statewide Desktop Distance Learning Project that produced a model for scalable and sustainable infrastructure for the development, delivery, and support of on-line courses and programs.

The second "I" in OIIT, representing instruction, became the focus of the BOR during its 1998-99 term and resulted in "Educational Technology and the Age of Learning" in which 16 principles to improve instruction were adopted. Within that same year, Advanced Learning Technologies (ALT) was separated from the Office of Information and Instructional Technology, where it had been for approximately 10 years, and was moved into Academic Affairs. ALT is responsible for developing and programming instructional technology and distance learning.

Given that the last major planning effort for IIT was completed in 1989, the BOR authorized a project to establish a master plan for information and instructional technology. The resulting report, "A Master Plan for Information and Instructional Technology" (the Master Plan), developed with the assistance of Arthur Andersen during the spring of 2000, was approved at the BOR August 2000 meeting.

While the Master Plan did provide a number of important tactical recommendations, the project fell short of its initial more strategic focus due to time and budget constraints. Important recommendations that were implemented include the investment to upgrade performance of the PeachNet network, the establishment of a planning function within OIIT, and the establishment of a BOR standing committee on IIT.

For a chronological timeline, see Appendix C.

Pause on Today

During a meeting of the newly formed BOR IIT committee in the fall of 2000, members raised concerns that the Master Plan for IIT had not gone far enough and that it needed to be strengthened to include a more strategic view. The committee asked that an enhancement project be implemented resulting in this strategic planning effort and resulting plan. OIIT engaged the services of Cornelius & Associates to assist with the following deliverables:

- An IIT Strategic Plan for the University System of Georgia.
- A process for continuous IIT Strategic Planning for the University System of Georgia.
- Recommendations for Immediate Measurable Actions and Policy Changes.

The project began by exploring the current situation of IIT in the University System of Georgia and the trends and challenges we face. The next two sections of the Plan highlight our findings.

- ***Current USG IIT Environment***
- ***Current IIT Trends and Challenges***

The IIT Strategic Plan has been developed in conjunction with and in support of the ongoing development of a new overall Strategic Plan for the USG included in Appendix A.

Current USG IIT Environment

For more than 10 years, IIT within the USG has expanded and strengthened its ability to provide a robust technological environment to meet the ever-changing needs of the System. In doing so, technology has touched many areas of learning throughout the System. The following section includes an overview of the current IIT environment upon which the strategic planning efforts will build, expand, and improve.

Instructional Support

Many areas of learning and instruction have been positively impacted through improvements in technology. Following are the key areas of IIT support for instruction, libraries, and learning.

- Advanced Learning Technologies (ALT) is the System unit responsible for the promotion and programmatic support of distributed education within and among the USG institutions.
- ALT facilitates the development of System programs supported by the Georgia Distance Learning and Telemedicine Act.
- Two-way interactive video service (Georgia Statewide Academic and Medical System (GSAMS) H.320 protocol) and support are provided by the Georgia Technology Authority.
- GALILEO provides one statewide library system for access to periodical and reference databases to enable access to a wide variety of information resources.
- GALILEO Interconnected Libraries (GIL) provides one Systemwide library automation system, Voyager from Endeavor (one of the leading on-line library automation systems), for all the academic libraries.
- Digital Library of Georgia is the third phase of GALILEO designed to increase the digitized holding of Georgia-specific information.
- PINES (Public Information Network for Electronic Services) provides one statewide library automation system for public libraries.

Software

The increased buying power and the effectiveness of Systemwide service support have facilitated the implementation of Systemwide software to help manage critical administrative functions.

- One course management system: currently WebCT.
- One major relational database management system (RDBMS): currently Oracle.
- One Human Resources and Financial system: currently PeopleSoft.
- One Student Information System: currently Banner.
- Primary operating system: UNIX, currently supplied by two vendors, Hewlett Packard and Sun.
- Principle desktop software site licenses: currently from Microsoft.

Network Infrastructure

A robust network infrastructure has been a critical component in providing the technology resources needed by the USG.

- TCP/IP protocol is supported for wide area networking.
- Primary Internet Service Provider (ISP) services for USG institutions are provided by the System for access to the web through Netscape and Internet Explorer.

Management

Effective and efficient management provide the ongoing innovation and support of technology throughout the System. Several groups have been tasked with providing this ongoing guidance and support.

- The System's Chief Information Officer leads the System-level Office of Information and Instructional Technology (OIIT).
- Enterprise Systems & Services (ESS) within OIIT provides support for applications and infrastructure.
- Library and Customer Information Services (LCIS) provides support for library systems, GALILEO, and GIL, and for the Customer Services Center (Help Desk).
- Advanced Learning Technologies (ALT) provides support for instructional technology activities of System faculty and staff.
- The Administrative Committee on Information Technology consists of a representative from the highest level of IIT management from each System institution.
- The BOR IIT Committee, a standing committee of the Board of Regents, consists of five Regents who are responsible for, through the Board of Regents, strategic direction and oversight to the System's information and instructional technology policies and practices.

System IIT Funding

Funding for technology and its related functions currently comes from different sources.

- Funding for system level operations and services is provided through the general Funding Formula. Some services are supplementally funded through campus charge backs.
- Some one-time funds are provided by proceeds from the Georgia Lottery and through "Special Initiative" budget requests.
- The majority of technology funding for campuses comes from the general Funding Formula dollars and is supplemented by a Technology Factor, which was 1.7% of the Formula total for FY02. Each campus makes decisions on how to allocate these funds.
- Campuses charge set technology fees for each student per semester.

Current IIT Trends and Challenges

Scanning the current environment for trends and challenges is a critical component of any strategic planning process. Therefore, a comprehensive external and internal analysis was completed that explored the current status of Information and Instructional Technology within the University System of Georgia. The analysis captured current trends, challenges, and the technology environment within the private sector and its impact on the USG. The following 20 factors that emerged played a key role in developing this Information and Instructional Technology Strategic Plan.

1. Technology is Changing At Unprecedented Rates

Unprecedented change continues to occur in the way computing, communications, and information access take place. National and international grid development, e-books, e-journals, wireless networks, 24/7 access, pervasive computing, innovations in enterprise security, applications of e-commerce, and e-business strategies represent continuous challenges for today's higher education managers and leaders.

2. Traditional Views and Traditional Thinking No Longer Fit

Traditional views and traditional thinking no longer fit with today's technology-enabled environment. Areas where this is most evident include recognizing the on-line student; comprehending the vast information access needs; understanding the new concept of campus boundaries; balancing required standards with free choice; and a new understanding and agreement on specific roles, responsibilities, and relationships of the institutions and the System.

3. Higher Education is Operating in an Increasingly Competitive Environment

The information and instructional technology field continues to evolve at Internet speed, with new organizational paradigms, technologies, systems, and applications. Universities and other institutions face great challenges in their efforts to develop, enhance, and maintain infrastructure and service programs to meet the delivery opportunities available and to provide environments competitive with other industries. The removal of traditional boundaries of time and place has created a new and challenging environment for higher education.

4. USG Enrollment Numbers Are Increasing

Projections suggest that enrollment within the USG will increase at a substantial rate during the next 10 to 15 years. This growth will have a significant impact on facilities, technology infrastructure, and technology support systems.

5. One Size Does NOT Fit All

The BOR with its 34 academic institutions and its 58 public library systems are a diverse group with varying needs. This fact must be recognized in any planning and decision-making in an effort to support innovation and collaboration while balancing economics and autonomy.

6. Understanding Customers and Their Needs Is Becoming More Important

Our constituents—students, faculty, staff, and Georgia residents—all exhibit characteristics of customers. The changing face of technology and the increasingly competitive higher education environment requires a focus on identifying these characteristics, understanding customer needs, managing expectations, and ensuring the delivery of quality services and support.

The commercial world is taking advantage of technology's ability to enhance their customer relationships. Our students, faculty, staff, and residents of Georgia expect the same level of attention, ease of use, and convenience.

7. USG Policies Have Not Kept Pace with the Rapidly Changing Technology Environment

The USG policies have not kept pace with the rapidly changing environment and the escalating role of technology in higher education. Policies exist that do not support the effective use of technology and have become roadblocks to progress. Current and emerging issues related to accountability and the appropriate, ethical, and legal use of information technology have placed higher institutional and System priority on the development of coherent and consistent policies and response strategies. Concerns about the potential impact caused by new and emerging legislation also exist. Other traditional issues such as intellectual property rights, personal and institutional privacy, and academic integrity must be redefined in our expanding digital world.

8. Information and Instructional Technology's Role In USG Planning and Policy Development Is Insufficient

IIT has become essential in meeting the ongoing vision and mission of the USG. IIT is no longer a peripheral; it is a strategic and critical resource. No function within the System or its institutions is unaffected. Even so, IIT is not sufficiently recognized and involved at all levels of the System and its institutions for planning and decision-making.

9. USG Funding Challenges Are Increasing

The USG does not have a clear picture of its current IIT spending. Current IIT funding sources are unreliable, confusing, and often uncoordinated in their efforts to tie resources to requirements. Many people involved in the planning processes do not understand nor consider the total IIT costs—including initial and ongoing costs. As a result, a high level of uncertainty often leads to a mismatch in expected services and the actual IIT resources available. The System finds it especially difficult to adequately fund ongoing maintenance, training, and the replacement of obsolete systems. Budget-planning cycles and processes are rigid and make it very difficult for the System to respond effectively to changing technologies and the related ongoing costs.

10. Systemwide Accountability for Operations and Services Are Unclear

Responsibilities and accountabilities for information and instructional technology operations and services throughout the System are unclear. Pressure has increased significantly for clarity of who is accountable for operations and services and for uniform application of measurements to ensure this accountability. This pressure comes from the state and the federal government, as well as from the System.

11. Awareness is Increasing That Technology Should NOT Drive System Decision-making

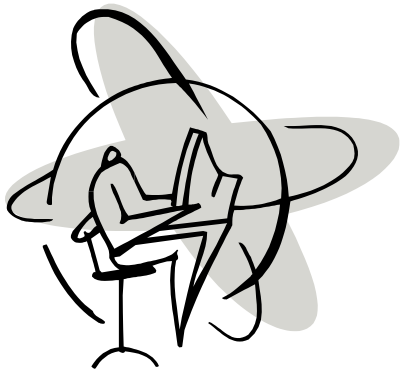
With the increasing excitement, power, and capabilities of technology, the possibility exists of losing sight of the USG's critical drivers for decision-making. The vision of the USG, as well as the individual visions and missions of its institutions, remain the primary drivers of goals and objectives for ongoing decision-making. Technology and information access exist as critical enablers in reaching the greater vision of a more educated Georgia.

12. Required Information for Effective Decision-making is Inadequate

Information systems serve the mission-critical areas of the institutions and the System. These systems are expected to perform flawlessly and provide accurate data in support of planning, reporting, and decision-making. However, the appropriate decision-support systems are not in placed within the USG. The three primary issues include data quality and standardization, cross-system data analysis, and sufficient access to data.

13. Demand is Increasing for Remotely Delivered Courses and Instruction, Research Support and Access, and the Associated Demand for Information Access Through Libraries

A broadening demand exists for courses and instruction that are delivered remotely to a diverse set of students. The ubiquity of the Internet, the maturation of browser technology, the development of course management systems, and the proliferation of digitized content have placed new tools in the hands of faculty members and broadened their student base. With this increased demand comes a need for a collaborative process to develop course material. These collaborative efforts include faculty, librarians, instructional designers, IT professionals, programmers, web developers, graphic designers, here in Georgia and in other states.



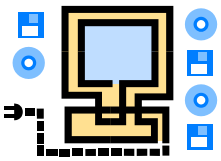
In addition, nearly every academic discipline now requires technology in support of its research. Research support and access issues include collaboration, centralization of support, introduction of new technologies to the research community, and training of researchers in the effective use of technologies.

14. Collaboration Has Become a Requirement

Not only has the pace of technology change increased, the entire "playing field" of collaboration both within and outside of the system has significantly shifted. This necessitates changes in the partners with whom higher education must form alliances and changes in the types of relationships developed. Increased costs of resources are making partnerships a necessity to continue to provide wider access to increasingly costly systems and information. Partnerships with business and technology and information providers are becoming more prevalent. Examples include the Intellectual Capital Partnership Program (ICAPP), which involves business partners in a number of System projects. New national initiatives like Internet2 could not have been conceived without collaborations among groups of institutions. USG experience has shown collaboration, which includes sharing of resources coupled with the use of best practices is effective.

15. Establishing Adequate Infrastructure To Support All Areas of Georgia Continues to be Challenging

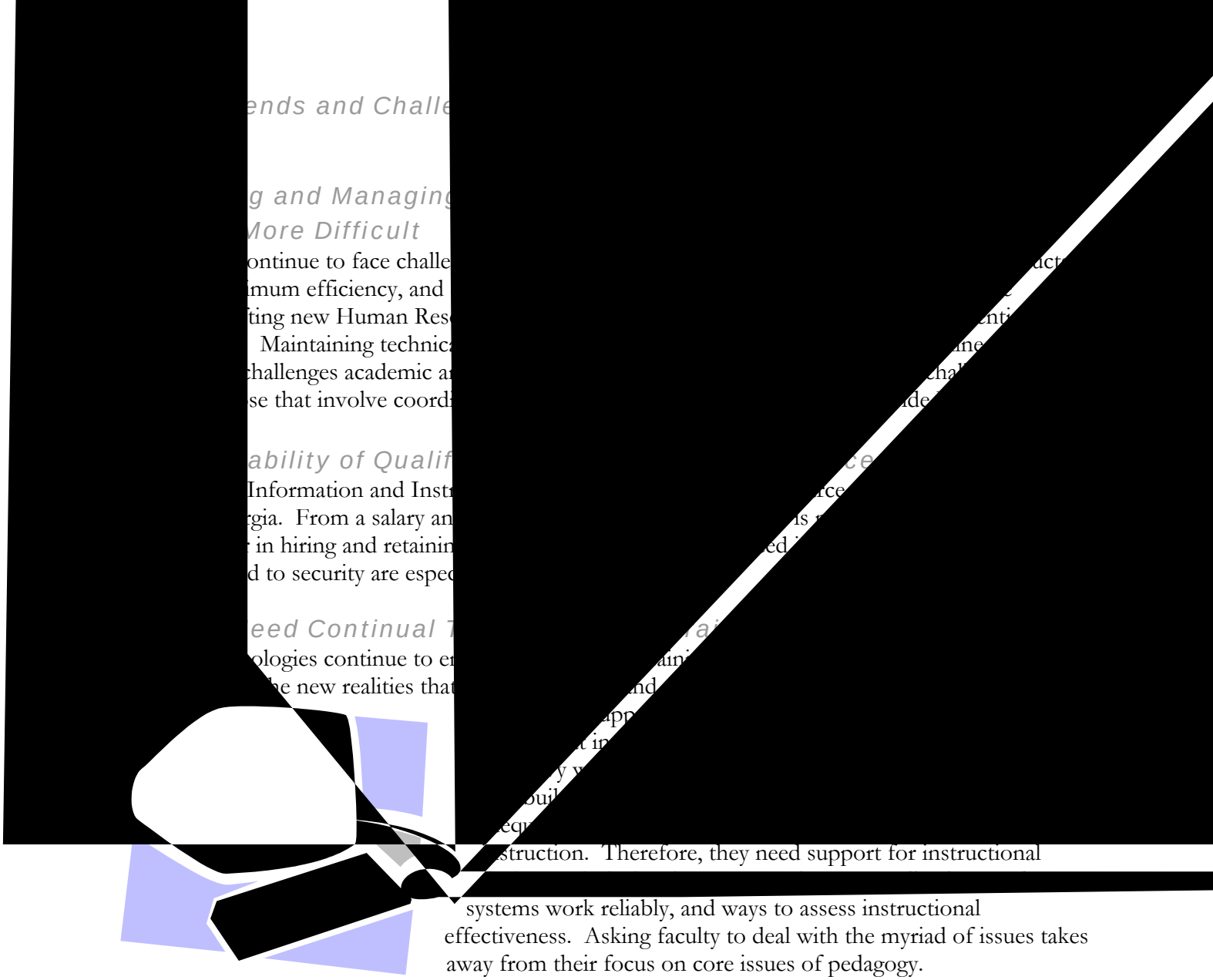
Creating and maintaining a robust technical architecture to support instruction, information systems, research, and information access needs, while accommodating rapid change, is a daunting task. Basic core services and infrastructure range from networks, hardware, and operating systems to database management, network system management, directory services, authentication systems, production readiness, imaging, and multimedia.



While a great deal of progress has been made, critical issues still remain concerning the System's infrastructure. Adequate infrastructure, especially with respect to connectivity, is the one essential resource that determines whether technology can be used effectively. The current infrastructure remains suspect, especially in meeting the new demands on the delivery and support of instruction, research, and administration such as nonstop access and support (24/7), ubiquitous connectivity, and uniform service levels whether this takes place in a metropolitan or rural area.

16. A Secure and Safe Technology Environment Has Become Difficult to Maintain

As the network and Internet user base expands, computers and operating systems are changed, improved, and "opened." Software becomes increasingly complex and difficult to maintain. These changes increase our concern about protecting institutional networks, computer systems, and Systemwide data. Security is a critical issue for Georgia, and the Georgia Technology Authority (GTA) is investigating options for the state. To justify our concern, we can point to the number of outbreaks of malicious code, viruses, attempted or successful intrusions, probes, and scans of computing systems. All have dramatically increased over the last few years. And, with the changes and increasing complexity of newer personal computers, multi-user workstations, and software, our traditional users have been unable to stay current and take full advantage of the available technology.



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struction. Therefore, they need support for instructional systems work reliably, and ways to assess instructional effectiveness. Asking faculty to deal with the myriad of issues takes away from their focus on core issues of pedagogy.

20. Current Training and Staff Development Are Inadequate

Continual changes in technology demand continual renewal of skills. The pervasiveness of technology requires a workforce that is more fluent in many aspects of technology. Our traditional training models were not designed to support either of these major demands. Few of the current efforts have provided the breadth and depth of training required to support the continually changing systems and their management. As a result, the gap between what staff and end users know and what they need to know to take full advantage of technological capabilities continues to widen. The diversity of the institutions and public libraries also has not been considered in the planning of current training. For example, small departments with few staff members find it difficult get training and continue to run their departments.

Fast Forward to the Future

This strategic plan describes the framework that Information and Instructional Technology (IIT) for the System needs to provide help to ensure a more educated Georgia through effective, innovative technologies and services. First, we have recognized where we are. Next we determine where we wanted to be. And finally, we will establish what we need to do.

Where we want to be—our future—is outlined in the following sections:

- ***The USG IIT Foundation – The USG Vision, Mission, and Guiding Principles***
- ***The Strategic Goals and Objectives***

The USG IIT Foundation

The following IIT Vision, Mission and Guiding Principles were developed in response to the analysis of the current IIT environment and serves as a foundation for the Strategic Goals and Objectives.

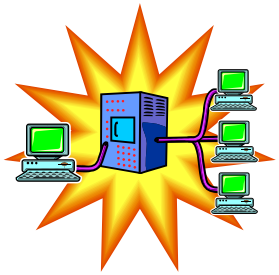
The USG IIT Vision

To enable *learning without limits* through effective, innovative technologies and services.

The USG IIT Mission

The mission of Information and Instructional Technology (IIT) for the University System of Georgia (USG) is to deliver comprehensive technology resources, services, and solutions to the USG students, faculty, staff, and Georgia residents. IIT will also provide Systemwide leadership through dynamic policies and practices, accountability, and stewardship of resources.

The USG IIT Guiding Principles



1. The primary purpose of Information and Instructional Technology is to support the Systemwide efforts of creating a more educated Georgia.
2. Learning and development are empowered by and rely upon barrier-free access that is facilitated by the use of information and instructional technology.
3. Ongoing technology planning and management must be integrated at all levels within the System and institutions.
4. Accurate and reliable data are essential to executive and administrative management, decision-making, and accountability throughout the USG.
5. Dynamic policies, procedures, and standards that foster and facilitate collaboration while remaining sensitive to the heterogeneous nature of institutions and public libraries are critical for the System's delivery of quality information and instructional technology services.
6. Access to resources through an up-to-date, reliable, and robust technology infrastructure is fundamental in delivering quality, comprehensive services.
7. Ongoing training and professional development for faculty, staff, and end-users are crucial for effective use of information and instructional technology.
8. Creating tomorrow's workforce requires the effective and efficient use and understanding of information and instructional technology.
9. Understanding USG customer needs and managing their expectations are essential for the delivery of quality information and instructional technology services.
10. Early analysis and adoption of emerging technologies and innovations facilitates the competitiveness of the USG and benefits the students, faculty, staff, and Georgia residents.
11. Information and instructional technology is a fundamental utility function and must be adequately funded.
12. Quality of living for all Georgia residents is improved by technology-enhanced access to opportunities for life-long learning.
13. Libraries are critical in making access to information and instructional technology resources widely available to all residents of Georgia for lifelong learning, without regard to geographic location, socioeconomic status, or other factors.
14. The measurement of information and instructional technology goals and objectives throughout the System encourages accountability.
15. Systemwide security efforts must be proactive and balanced with access and innovation needs.

The Strategic Goals and Objectives

The IIT Vision, Mission, and Guiding Principles describe the foundation on which the following strategic goals and objectives are built. The five Strategic Goals listed below outline the major areas of focus for IIT that are critical in supporting the USG vision of a more educated Georgia.

Goal #1: **Enhance Student Learning**

Goal #2: **Expand Reliable and Secure Access to Information and Services**

Goal #3: **Increase Customer Focus**

Goal #4: **Ensure Continuous Innovation**

Goal #5: **Effectively and Efficiently Plan and Manage IIT Operations**

Following are the Strategic Goals and their supporting Strategic Objectives.

Goal #1: Enhance Student Learning

Student learning and development are empowered by technology. The USG provides a seamless environment for learning through boundless access to information, educational, and research resources both inside and outside of the classroom for all types of students from undergraduates to the life-long learners.

Strategic Objectives:

1. Establish a mechanism to research the impact of technologies on student learning, retention, and graduation and to translate results from the research into curriculum planning and teaching methodologies.
2. Create an environment for enhancing learning where opportunities and resources are explored, best practices are collected, and deployment strategies are developed, implemented, and evaluated. Examples include distributed education, effective use of technology in the classroom, and library linkage.
3. Create the means for easy, efficient, and reliable access to learning resources anytime and anyplace and for learning experiences that enable collaboration among learners.
4. Develop a common architecture that encompasses available educational resources and systems and breaks down barriers between institutions, libraries, and other sources of learning.
5. Continually improve standards, policies, procedures, and services that facilitate seamless, integrated learning.
6. Develop a comprehensive and ongoing training program for faculty, staff, and end users to ensure effective use of technology that enhances learning.

Goal #2: Expand Reliable and Secure Access to Information and Services

A robust, secure, and flexible infrastructure allows efficient and reliable access to information and accurate data for learning, research, and decision-making.

Strategic Objectives:

1. Develop a robust, high-availability infrastructure to adequately support the delivery of exemplary information and instructional technology services throughout the University System of Georgia.
2. Develop and implement a Systemwide plan that includes policies and procedures for ensuring security and business continuance.
3. Develop and implement systems that support and enable effective data entry that uses integrated, accurate, and consistent data definitions and data systems to ensure the integrity of data and information throughout the System.

Goal #3: Increase Customer Focus

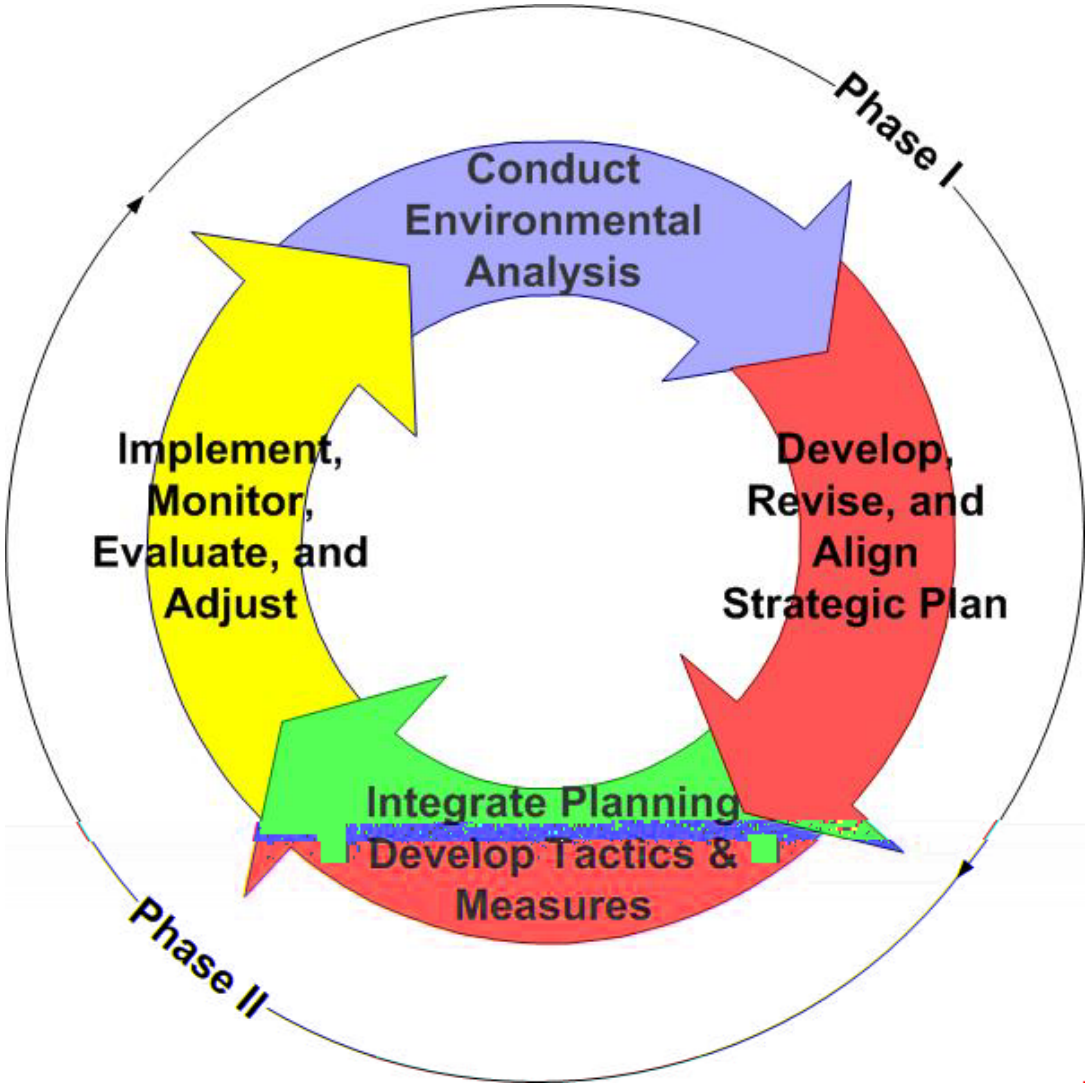
IIT encourages and supports an operational environment in which characteristics of its customers – students, faculty, staff, and the Georgia residents – are identified, their needs are understood, relationships and expectations are effectively managed, and quality assurance is fostered for high-quality services and support.

Strategic Objectives:

1. Identify IIT customer characteristics and determine their expectations and needs.
2. Develop and implement a Systemwide customer relationship management system in support of customer needs.
3. Establish a mechanism that leverages the resources of the System to facilitate educated decision making by customers regarding instruction, research, information access, and service offerings.

The Planning Process

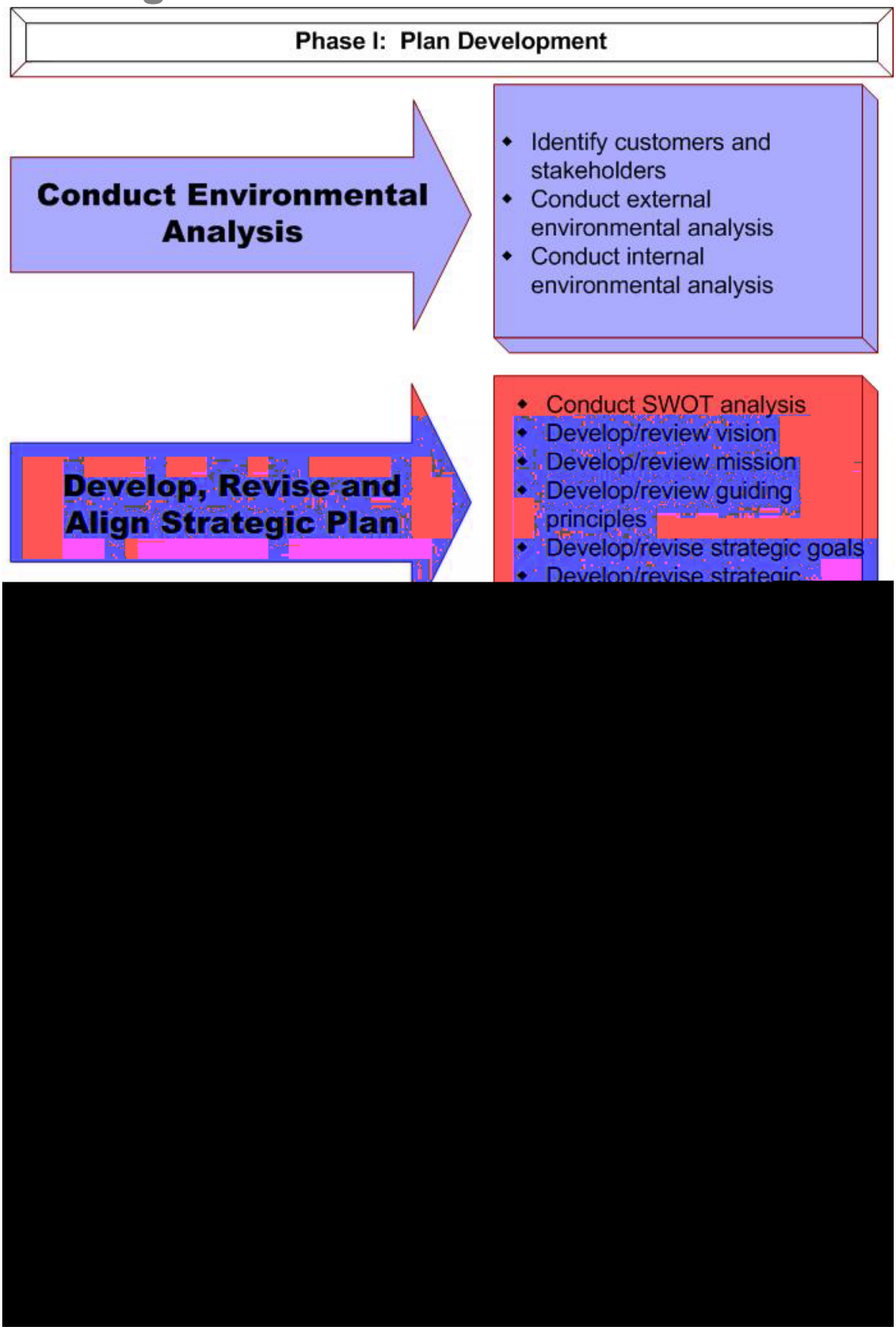
The development of the Strategic Goals and Objectives represents the first phase of an ongoing planning process for the USG IIT. The second phase begins the integration of planning efforts and the development of tactics and measures. While development of the USG IIT Strategic Plan represents a critical first step, its value will be gauged by the success of ongoing implementation, monitoring, evaluating and adjusting. The following diagram illustrates the continuous and integrated strategic planning process being used for USG IIT planning.



As we work toward achieving the goals and objectives outlined in this Plan, detailed tactical action plans will be developed and appropriations secured. Additional documents will be added as developed, and additional documentation will provide periodic progress reports.

This Plan will be incorporated into a continuous and integrated planning process. Periodically under the direction of the Vice Chancellor for IIT, this Plan will be reviewed and updated to reflect necessary changes as Systemwide needs evolve. The following chart provides more detail information about each of the steps in this process.

The Planning Process Details



Appendix A: The University System of Georgia Vision, Mission and Goals

USG Vision Statement

The University System of Georgia will create a more educated Georgia, well prepared for a global, technological society, by providing first-rate undergraduate and graduate education, leading-edge research, and committed public service.

USG Mission Statement

The mission of the University System of Georgia is to contribute to the educational, cultural, economic, and social advancement of Georgia by providing excellent undergraduate general education and first-rate programs leading to associate, baccalaureate, masters, professional, and doctorate degrees; by pursuing leading-edge basic and applied research, scholarly inquiry, and creative endeavors; and by bringing these intellectual resources, and those of the public libraries, to bear on the economic development of the State and the continuing education of its residents.

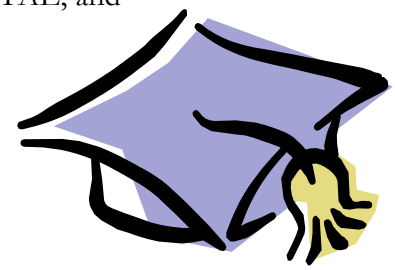
Each institution in the University System of Georgia will be characterized by:

- A supportive campus climate, leadership and development opportunities, and necessary services and facilities to meet the needs of students, faculty, and staff;
- Cultural, ethnic, racial, and gender diversity in the faculty, staff, and student body, supported by practices and programs that embody the ideals of an open, democratic, and global society;
- Technology to advance educational purposes, including instructional technology, student support services, and distance education; and
- A commitment to sharing physical, human, information, and other resources in collaboration with other System institutions, the public libraries, state agencies, local schools, and technical colleges to expand and enhance programs and services available to the Georgia residents.

USG Goals Statements

The University System of Georgia will ensure access to academic excellence and educational opportunities for all Georgians by:

1. Developing graduates who are intellectually and ethically informed individuals with defined skills and knowledge, capable of leadership, creative endeavors, and contributing citizenship in an ever-increasing interconnected world;
2. Expanding participation by increasing access while maintaining quality, enhancing diversity, focusing on the needs of nontraditional students, increasing distance education opportunities, advancing public library usage, and marketing the advantages of a postsecondary education to all Georgians;
3. Improving continuously the quality of its curricula, research activities, and international opportunities;
4. Increasing academic productivity through improved recruitment, increased retention, accelerated graduation, expanded credit generation, augmented continuing education opportunities, and current technology;
5. Emphasizing the recruitment, hiring, and retention of the best possible faculty, staff, and administration;
6. Accelerating economic development by providing, when feasible, needed graduates, appropriate academic programs, and expanding marketing of the System and its institutions as an economic asset of the state;
7. Seeking the most efficient, effective, and technologically sound business and service best practices, and regularly comparing ourselves to national peers;
8. Providing and maintaining superior facilities, funded by innovative mechanisms which increase the speed with which they are usable;
9. Making University System of Georgia education seamless with K-12, DTAE, and independent colleges;
10. Increasing, diversifying, and strategically allocating funding;
11. Maximizing cooperation with other state agencies, boards, the Office of the Governor, and the General Assembly, while maintaining the constitutional authority of the Board of Regents.



Appendix B: OITPlan Implementation Long-Ranged Plan *(Developed 1989 - 1990)*

Purpose

The general purpose is to provide a plan of implementation for OITPLAN. OITPLAN was developed during FY89 by representatives of the institutions and the Central Office working with OIT.

General Philosophy

Some philosophical viewpoints reflected in the work of the OIT Planning Project were:

- The Office of Information Technology is responsible for providing centralized and common information services for the Regents' offices and for all units of the University System.

Some aspects of the mission of the Office of Information Technology are to:

- Facilitate excellence among the schools. Increasingly, information technology is critical to excellence in instruction and research.
- Facilitate management of the System.
- Provide effective and efficient central services.
- Provide assistance to schools regarding local needs.

Information Technology must be managed in a manner consistent with the general structure and management of the University System. The University System of Georgia consists of all State-funded institutions of higher education in Georgia. It is organized so as to facilitate more effective and efficient governance of State institutions than might be the case with each acting independently. The constitutional provisions establishing and governing the System imposes certain requirements on the institutions as well as the System. The Board of Regents and its administrators affect the operation of the institutions through their actions to carry out their charge for effective and efficient management. Also, there are influences brought to bear through the joint agreement of the institutions that collaborative actions and standards are better than independent action in some cases. Although these forces result in an essential, important, and active job of central administration, a high-degree of individual institutional self-direction is maintained. Participative involvement is sought even for those things, which must be handled centrally. The various components of central administration and services must follow a pattern similar to that of the System as a whole. So it is with Information Technology.

Institutions vary in their complexity, characteristics, and needs. Information systems should conform to the essential characteristics and requirements of individual institutions as much as possible within the constraints of resources and System policies and requirements. Some institutions and systems will require centralized operations and support; others are better decentralized.

Information technology is of strategic importance to the mission and competitiveness of the University System and its institutions. Advancements in the effective use of information technology should be emphasized throughout the System. Continuous and participative strategic planning is needed.

The organization structure of the University System provides significant opportunities for collaborative efforts, central standards, vendor relations, site licenses, quantity/group purchases, etc. OIT and the Central Office should pursue these opportunities wherever practicable.

Networking of the units within the University System is regarded as a basic utility. Effective communications and networking is critical to the successful implementation of many of the goals and recommendations of this plan, and is critical to the future of computing in the University System. It will facilitate the distribution of functions, the sharing of resources, the coordination of actions, efficient access to outside resources, and effective interpersonal and inter-institutional communications. It will also facilitate access to data essential to the functions of the Central Office. The institutions are networking their campuses, and expect to have interconnecting links provided by the University System.

The use of electronic mail within institutions and on national and regional networks is growing rapidly. Many faculty and staff are finding electronic mail to be valuable or even essential in their work. At present there is no common and effective way to provide linkages among the various mail systems to facilitate efficient communications within the System to support System functions. A common electronic mail environment is also a basic utility that should be available within the University System.

The most effective and preferred method of implementing standard systems is through the incentive of support services for those standard systems. The standards must be supported. Options within the standards are needed in some areas, but must be limited to the support potential of staff and other resources. Volume purchase agreements for items conforming to the standards gives an economic incentive to the standards, and offers to save resources for the System.

Information systems staff are service providers to policy and operations personnel. E.g., automated accounting system services are servant to the accounting department in regard to accounting policies as well as operational requirements. Consequently, support services for a standard application will typically require the collaboration of information technology and functional policy and operations personnel.

Goals and Objectives

To implement the recommendations of OITPLAN, which are summarized as follows:

1. Distribution and unification of functions appropriate to each level/unit.
2. Implementation of up-to-date, Systemwide communications network.
3. Implementation of effective, common, Systemwide electronic mail.
4. Establishment of a computing environment that:
    a. protects future investments in application software, and
    b. allows flexibility in selecting hardware.
5. Adoption of a common relational data base management for administration.
6. Implementation of a standard protocol for Systemwide electronic communications.
7. Selection of equipment and software for which support will be available.

System Strategies/Service Structures/Institutional Groupings

The Central Office and OIT will approach administrative computing within institutions within three categories, as described below. Institutions may, within the constraints indicated, request the category in which they wish to operate. All three categories assume conformance to Central Office policies regarding information reporting and quality.

I. Independent Campus-Based Systems

The Universities develop and operate their own administrative information systems, conforming with System policies. Collaboration is encouraged even in this category.

II. Common Integrated Campus-Based Systems

This category will include campuses primarily using standard platforms and applications software implemented in an integrated environment to meet their administrative information needs. Predefined central systems support will be provided in certain areas. Campuses may supplement the standard applications with locally developed/acquired applications and programs.

III. Centralized and Centrally-Supported Systems

Campuses in this category will rely mostly upon centrally supported systems to meet their primary information systems needs. This will include a limited amount of on-site operations and development.

Central Services/Hardware

Central, shared computers will be provided for centralized applications required by policy or economics; e.g., administrative software for small schools, special databases, specialized academic/research software, and general timesharing. A reasonable level of such shared hardware will be provided by OIT, in order to assure a stable base of operation under central control. However, wherever possible and practicable, arrangements will be made with individual institutions to provide services/resources for use by other institutions via the University System network.

Central Services/Software

Common (standard) software for administrative applications will be implemented wherever it is advantageous and practicable. This will provide more efficiency and effectiveness in acquisition and support, as well as a more uniform and coordinated system operation. For certain applications use of the standard software may be required. In other cases, however, use of the supported standard software will be recommended for its advantages but not required.

The present approach of providing common financial systems is expected to continue. Also, central applications to meet the needs of System reporting and planning will continue.

New application areas such as student records and library systems will be pursued.

A standard relational database will be implemented for administrative applications, along with 4th generation development tools.

As soon as practicable a non-vendor-specific operating system will be adopted. This will provide flexibility in selecting hardware and will provide a higher degree of protection of our software investment.

Communications and Networking

The OIT will proceed rapidly with the implementation of the Information Technology Communications Network (PeachNet). A standard electronic communications and networking protocol will be implemented for Systemwide communications. In the near-term, the standard will be TCP/IP. The long-term standard will be the OSI standard of the International Standards Organization.

An effective common electronic mail environment for the University System will be implemented.

Support

The OIT will select and announce equipment and software for which central technical support will be available. User functional support, if needed, will be provided by the appropriate functional office, usually not by OIT.

Organization/Policies and Procedures/General policy application

University System policies regarding information reporting and quality will apply equally to all institutions regardless of the characteristics of their information system.

Advisory Committee on Information Technology

The present "USCN" (University System Computer Network) organization structure has been replaced with an Administrative Committee on Information Technology under the Bylaws of the University System Advisory Council. Institutional representatives to this Committee will be responsible for representing all information technology interests on the campus; administrative and academic. Two subcommittees are anticipated, one for administrative interests and one for academic interests.

The Office of Information Technology

The Office of Information Technology is the service organization under the Vice Chancellor for Information Technology. The responsibilities and functions of the Office included providing essential central computing/information technology services, facilitating campus computing through support functions (e.g., consulting, training, and site licenses), implementing an up-to-date, Systemwide data communication system, and facilitating the sharing of information throughout the system. These responsibilities and functions are seen to apply to administrative, instructional, and research activities.

Central Office Functions

Administrative processes implementing central policies will be centrally defined and related administrative software will be centrally developed/selected. Also, a data element dictionary maintained by the OIT will define items required by the Central Office, and other items required to support collaborative efforts among the institutions. Further, a unified applications environment will be developed at the Central Office level.

Communications and Sharing

Improved communications with both the administrative and the academic community will be developed. Better communications mechanisms will facilitate: sharing of information on software, participative decision making regarding software, adequate representation of interests, and the dissemination of policy on matters such as software copyright. Also, collaborative procedures will be developed for such benefits as Systemwide purchase agreements and site licenses, and unrestricted use of servers placed on the communications network.

Information resource sharing

Information resource sharing within the University System will be promoted, with all shared resources being accessible from any location on any campus. Information resources external to the University System will also be made available to all locations.

Management of Services

The services of OIT should be managed on a business-like basis with adequate cost and benefit evaluation, quality standards, etc. Also, a stable funding base should be established which recognizes the need for growth, upgrading, replacement, and maintenance. Users should participate in the planning and evaluation of OIT services. Various user group organizations may be of assistance in this regard, in addition to the Administrative Committee.

FIRST PHASE

Purpose

The major purpose of this first phase is to facilitate the institutions meeting present urgent needs within the direction established by OITPLAN.

General Philosophy

This first phase of implementation should meet urgent institutional needs in a timely manner. Each step should move in the long-range directions established in OITPLAN, while minimizing the discontinuities experience in the short run.

Goals

- Establish platforms for long-ranged development
- Establish basic PeachNet structure
- Begin common software acquisition

Objectives

The first phase of OITPLAN implementation will address urgent needs, as well as specific decisions required to establish the common directions recommended. Included in the first phase will be:

- TI990 replacement platform
- Selected approach (hardware and software) to integrated administrative computing on campus
- Implementation of PeachNet, over a three-year period
- Selection of common relational database software
- Selection of Student Information System software
- Selection of Library Automation software

System Strategies/Service Structures/Institutional Groupings

All institutions will be connected to PeachNet. Each selected common software applications will carry its own specification regarding implementation requirements and options.

I. Independent Campus-Based Systems
This category is not expected to expand beyond the Universities. Even for this category, an improved statement of functional and system performance requirements will be pursued.

II. Common Integrated Campus-Based Systems
Institutions within this category will, on a schedule suiting their needs, implement the selected common administrative platform and software. They may develop or acquire other applications to suit their unique needs and priorities.

III. Centralized and Centrally-Supported Systems
Institutions within this category will replace the TI990 with the selected platform and software, which will be fully supported by OIT and the Central Office, within the specified schedule.

Central Services/Hardware

The central Cyber service will be maintained through FY92. Replacement platforms for the Cybers will be coordinated with platform selection for administrative computing in Categories II and III.

Institutions will be expected to replace their TI990s with one of the selected platforms described below by July 1991. These systems must be replaced because of age, high maintenance cost, lack of communications and other up-to-date features, and because of the need to move central support to other platforms.

The TI990 replacement platform for the Category III institutions will be the TII500. This system will allow institutions to use existing peripherals and the present skills of employees. It provides convenient transition tools, minimizing the impact of conversion. It provides a Unix environment, and meets other requirements of OITPLAN as well.

The replacement platform for the Category II institutions will be selected by RFP. The system will conform to the requirements of OITPLAN, and have a plentiful supply of software. It must conform to the communications requirements of PeachNet. It must support distributed computing, and be modular for growth from a small to a relatively large-scale machine.

Central Services/Software

Applications on the Cybers will be targeted for conversion to the replacement platform by FY92, after some period of parallel operation. The Payroll System, however, will probably be replaced earlier, due to its age and condition. Also, present organizational arrangements will facilitate its integration with the accounting system, and its expansion to a more full-featured payroll/personnel system.

PLATO services will be replaced with NovaNet services during FY90.

Accounting and Budgeting systems on the TI990 will be converted to TII500 operation by OIT. If these applications are approved for another platform (Category II), conversion may be performed by a contractor (possibly one of the institutions). Applications implemented on the TI990s by individual institutions will be converted by those institutions. (Possibly OIT can assist in organizing a collaborative conversion project, via institutions or contractors.)

A common relational database package will be selected for administrative systems. The license for this package should also make it available for academic use. New common administrative applications will be implemented under the database environment. Institutions will be encouraged to develop their unique applications under the database.

New applications addressing priority institutional and central office needs will be pursued. Specifically, projects will be established to consider and, if appropriate and practicable, acquire common software for library automation and student records. Group purchase contracts, site licenses, support agreements, etc., will be established as benefits to institutions adopting the standard system.

Communications and Networking

PeachNet communications equipment will be installed in all of the 'hub" communication sites during FY90. All institutions will be PeachNet compatible by FY92.

A common electronic mail environment will be implemented by FY92.

Access to common information resources will be promoted with the completion of basic PeachNet implementation.

Support

Central support will continue at its present level for Category III schools.

Category II institutions will receive central support for standard applications. The extent and type of support to be provided for each standard application will be negotiated at the time the application is accepted for implementation. Central support may be provided by OIT, a designated institution, or a contractor.

Organization/Policies and Procedures (To be developed.)

Scope

Major conversions or redevelopment of existing systems are not anticipated in this phase, beyond what is required to handle the urgent needs within the new standards. Major new systems development/acquisition will be limited to student records and library systems. Many institutions perceive urgent needs in these areas.

Appendix C: The USG IIT Story

1971 – 1989

- National Science Foundation grant leads to development of first System computing group - University System Computer Network (USCN) composed of campus computing leaders appointed by institutional presidents.
- University of Georgia Director of Computing Activities also appointed as System's Assistant Vice Chancellor for Computing Systems.

1989 - 1990

- Office of Information Technology approved headed by a new Vice Chancellor (VC) reporting to the Chancellor.
- OITPLAN developed setting strategic directions for System IT.
- New Administrative Committee on Information Technology (ACIT) approved.
- PeachNet, the System's IP network, implemented to connect all campuses to each other and to the Internet.

1994 - 1996

- New Chancellor appointed.
- Vice Chancellor for IT moved to report to new Senior Vice Chancellor for Academic Affairs.
- New USG strategic plan developed with IT included in the plan's *Principles for Action.*
- New special IT initiatives: GALILEO, Connecting Teachers, Technology, Connecting Students and Services, and the Desktop Learning Initiative.
- New designation as the Office of Information and *Instructional* Technology.

1997 - 1999

- VC, with added title of Chief Information Officer (CIO), replacement appointed.
- Unit responsible for developing and programming instructional technology and distance learning, Advanced Learning Technologies (ALT), moved to report directly within Academic Affairs.
- BOR "Year of Technology" (1998-99) produces report, *Educational Technology and the Age of Learning*, that contains 16 principles focusing on effective use of technology in improving teaching and learning.

1999 - 2000

- VC/CIO replacement appointed.
- Public Libraries become part of the USG.
- Development of the *Master Plan for Information and Instructional Technology* with the assistance of Arthur Andersen focused on an evaluation of current conditions, tactical actions needed to correct major problems, and a recommendation for the formation of the BOR standing committee on Information and Instructional Technology (BOR IIT Committee).

2001 – 2002

- The new USG Vision, Mission, and Goals are developed.
- The BOR IIT Committee approves a project to develop a System-level Strategic Plan for Information and Instructional Technology.
- Phase I is completed. The IIT Strategic Plan is developed with the assistance of Cornelius & Associates.
- Phase II involving the tactical action planning process begins.
